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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,337	05/15/2001	Hirofaka Uchiyama	8085	1086

27752 7590 06/29/2004

THE PROCTER & GAMBLE COMPANY
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EXAMINER

CHANNAVAJJALA, LAKSHMI SARADA

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/855,337

Applicant(s)

UCHIYAMA ET AL.

Examiner

Lakshmi S Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3-17-04 has been entered.

Claims 1-58 are presented for prosecution.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16, 18-30, 33-43, 49, 51 and 53-55 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,879,666 to Lucas et al (Lucas) or US 5,874,067 to Lucas et al (Lucas).

Lucas (both US patents) discloses odor-absorbing compositions comprising up to 5% of uncomplexed cyclodextrin (col. 3-4), emulsifiers such as those described in the instant specification (col. 5) and citric acid, which is safe for human skin. In particular, examples I-III of Lucas disclose the specific castor oil surfactant described in the instant specification. With respect to the claimed limitations regarding the % and the level of functionally available cyclodextrin, it is inherent to the composition of Lucas because the uncomplexed cyclodextrin disclosed is in the same amount as claimed. Further, Lucas discloses the same surfactants as

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claimed and hence the CMC and clog P values claimed are inherent to the surfactants of Lucas.

Thus, Lucas anticipates instant claims.

Claim Rejections - 35 USC § 103

Claims 44, 50, 52 and 56-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,879,666 to Lucas et al (Lucas) or US 5,874,067 to Lucas et al (Lucas).

Neither patents of Lucas teach the use of the composition in a fabric softener, on a fabric or for hard surfaces. The patents also fail to disclose the specific quaternium antimicrobial compounds and the pH of claim 58.

However, both the above patents discuss the utility of cyclodextrin containing compositions for odor absorption on fabrics and in general odor absorption property of cyclodextrin complexes (col. 2). Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use cyclodextrin composition for treating animate as well as inanimate surfaces because the efficacy of cyclodextrin to absorb odor would still be maintained irrespective of the surface being treated and also because Lucas suggests using the composition for absorbing odors of a wide range such as foods, urine or other body fluids, that can be associated with skin as well as hard surfaces. Further, Lucas ('666) suggests incorporating antibacterial agents such as triclosan, eugenol, thymol etc., and adjusting the pH in the range of 3.5 to 8 (col. 5, col. 7). Accordingly, including any suitable antimicrobial agent and accordingly, adjusting the pH of the composition without losing the cyclodextrin activity would have been within the scope of a skilled artisan because Lucas ('666) suggests that a pH of 3.5 to 8.0 is suitable in order to reserve most of the cyclodextrin activity.

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Claims 17, 31, 32 and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,879,666 to Lucas et al (Lucas) or US 5,874,067 to Lucas et al (Lucas) in view of Hodul et al (Tenside, Surfactants & Detergents, 1997) or in view of Hodul and Dharmawardana et al (Langmuir, 1993).

Neither of the Lucas patents teaches the claimed method of preparation and aggregate formation of cyclodextrin and surfactants.

Hodul (abstract) studied the functional properties of inclusion complexes of nonionic surfactants such as polyethoxylated higher fatty alcohols and polyethoxylated phenols with cyclodextrin. Hodul studied properties such as wetting efficiency, foaming, detergent efficiency etc., and suggests that inclusion complexes of CD with polyethoxylated higher fatty alcohols increases the detergent efficiency to that of polyethoxylated alkyl phenols.

Langmuir teaches a method of determining binding constants for cyclodextrin inclusion complexes for surfactants, which measures the change in surface tension caused by addition of cyclodextrin to aqueous solution of surfactants such as SDS, cetylpyridinium chloride and correlated with surfactant activity. Langmuir teaches surface tension is a function of the amount of CD and that the binding constants are calculated which related to the micelle formation (above or below critical micelle concentration). Langmuir does not teach the claimed surfactants.

However, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention that CD and surfactant interaction play an important role in the detergency or surfactant efficiency of the compositions of Lucas and therefore it would have been obvious for a skilled artisan to choose the amounts of surfactants (compatible or incompatible with CD) such

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that the desired composition (homogenous versus aggregates) is obtained without sacrificing the odor absorbing property of cyclodextrin.

Response to Arguments

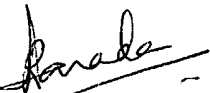
Applicant's arguments with respect to claims 1-58 have been considered but are moot in view of the new ground(s) of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 7.30 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lakshmi S Channavajjala
Examiner
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6/25/2004